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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,118

03/23/2006

Hayase Yamashita

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EXAMINER

BROOKS, KRISTIE LATRICE

ART UNIT

PAPER NUMBER

1616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,118	<b>Applicant(s)</b> YAMASHITA ET AL.	
	<b>Examiner</b> KRISTIE L. BROOKS	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/26/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Status of Application**

1. Claims 1-9 are pending.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

### ***Claim Rejections - 35 USC § 112***

- 3 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites "A production method..." It is unclear as to what applicant intends. The Examiner suggests changing the claim to read "A process of preparing..."

For examination purposes, the Examiner has interpreted the claims to read as "A process of preparing a process a granular pesticide preparation characterized in that non-disintegrable pesticide granules and a pesticidal active ingredient are subjected to a granulating treatment together with a surfactant and an extender to form granules having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length, wherein said non- disintegrable pesticide granules contain an acidic

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pesticidal active ingredient, a cationic surfactant and a basic substance, and are not disintegrated in water within 30 minutes.”

Claim 1 is drawn to a “granular pesticide preparation” and claim 8 is drawn to a “method of preparing a granular pesticide preparation.” However, it is unclear what Applicant intends by the word “preparation.” The term “preparation” implies the granular pesticide is being prepared by a process instead of it being a composition comprising different components. The Examiner suggests changing the word “preparation” to “composition”.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. (US 6,087,306).

Applicant claims a granular pesticide preparation characterized by comprising non- disintegrable pesticide granules containing an acidic pesticidal active ingredient, a cationic surfactant and a basic substance and a pesticidal active ingredient, and having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length.

**Determination of the scope and content of the prior art**  
**(MPEP 2141.01)**

Bell et al. teach granules comprising one or more acidic pesticidal active ingredient, such as a herbicide (i.e. fluazifop-p-butyl (pka~2.25)), or insecticide (i.e. lamda-cyhalothrin and pirimicarb), a cationic surfactant, such as cetyltrimethylammonium bromide, and a basic substance, such as acid clay (also called Japanese acid clay) (see the abstract, col. 5 lines 62-65, col. 6 lines 8-25, and Examples 1 and 8). The resultant granules typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm (see column 5 lines 3-11). The granules can be prepared according to conventional granule techniques, such as by an extrusion process, where all the ingredients are mixed together (see column 4 lines 50-67). The granules provide reduced sludge and are well suited for use when

housed in water soluble bag (see the abstract and column 6 lines 15-20). It is preferred that the granules of the invention swell to form a relatively cohesive swollen mass resulting in slowing of granule dispersion (see column 3 lines 7-23).

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

Bell et al. teach a granule composition comprising the instant ingredients and instant granule particle size but do not disclose any examples exemplifying such composition.

**Finding of prima facie obviousness  
Rational and Motivation (MPEP 2142-2143)**

However, one of ordinary skill in the art would have been motivated to make a granular pesticide preparation comprising non- disintegrable pesticide granules containing an acidic pesticidal active ingredient, a cationic surfactant and a basic substance and a pesticidal active ingredient, and having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length because Bell et al. suggests an improved granule preparation comprising one or more pesticidal active ingredients, cationic surfactants, and basic substances, that typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm.

Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make the instant granular pesticide preparation for the purpose of improving the quality of the granule preparation.

With regard to the recitation in claim 1, i.e. “basic substance which granules are not disintegrated in water within 30 minutes”, it is the Examiner’s position that since there is no difference between the basic substance taught in the prior art and the basic substance instantly claimed in claim 6, the composition taught by Bell et al. would possess the instant property.

With regard to the recitation in claim 1, i.e. “wherein said preparation has properties of settling in water rapidly after application on water surface and of disintegration in water within 30 minutes”, it is the Examiner’s position that since the components taught in the prior art fall within the scope of what is claimed and disclosed in Applicant’s specification, the composition taught by Bell et al. would possess the instant properties.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. (US 6,087,306) in view of Tocker (US 5,229,356).

Applicant claims a granular pesticide preparation characterized by comprising non- disintegrable pesticide granules containing an acidic pesticidal active ingredient, a cationic surfactant and a basic substance and a pesticidal active ingredient, and having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length.

**Determination of the scope and content of the prior art**  
**(MPEP 2141.01)**

Bell et al. teach granules comprising one or more acidic pesticidal active ingredient, such as a herbicide (i.e. fluazifop-p-butyl (pka~2.25)), or insecticide (i.e. lamda-cyhalothrin and pirmicarb), a cationic surfactant, such as cetyltrimethylammonium bromide, and a basic substance, such as acid clay (also called Japanese acid clay) (see the abstract, col. 5 lines 62-65, col. 6 lines 8-25, and Examples 1 and 8). The resultant granules typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm (see column 5 lines 3-11). The granules can be prepared according to conventional granule techniques, such as by an extrusion process, where all the ingredients are mixed together (see column 4 lines 50-67). The granules provide reduced sludge and are well suited for use when housed in water soluble bag (see the abstract and column 6 lines 15-20). It is preferred that the granules of the invention swell to form a relatively cohesive swollen mass resulting in slowing of granule dispersion (see column 3 lines 7-23).



**Ascertainment of the difference between the prior art and the claims**  
**(MPEP 2141.02)**

Bell et al. do not teach the herbicide to be sulfonylurea-based compound. This deficiency is cured by the teachings of Tocker.

Tocker teaches granular compositions comprising one or more active herbicides such as, sulfonylurea's, and adjuvants such as surfactants and fillers (i.e. clay, talc, bentonite, calcium carbonate) (see the abstract, column 2 lines 35-59 and column 2 lines 8-13). Examples of active herbicides include fluazifop-p, bensulfuron, pyrazosulfuron-ethyl, thiefensulfuron, etc. (see the Table listing of herbicide compounds in columns 4,5,7,9,11 and 13). The granules can be prepared by an extrusion process (see column 2 lines 38-51).

**Finding of prima facie obviousness**

**Rational and Motivation (MPEP 2142-2143)**

One of ordinary skill in the art would have been motivated to make a granular pesticide preparation comprising sulfonylureas because Bell et al. suggests granules comprising one or more active herbicidal ingredients, such as fluazifop-p butyl. It is already known in the art to prepare granule formulations comprising sulfonylurea's, such as pyrazosulfuron-ethyl and other herbicides, such as fluazifop-p as suggested by Tocker et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a granular pesticide preparation comprising a sulfonylurea herbicide since it is an obvious variation of herbicidal actives that can be used in granule formulations.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. (US 6,087,306) in view of Yoshimura et al (US 6,458,748).

Applicant claims a granular pesticide preparation characterized by comprising non- disintegrable pesticide granules containing an acidic pesticidal active ingredient, a cationic surfactant and a basic substance and a pesticidal active ingredient, and having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length.

#### **Determination of the scope and content of the prior art**

##### **(MPEP 2141.01)**

Bell et al. teach granules comprising one or more acidic pesticidal active ingredient, such as a herbicide (i.e. fluazifop-p-butyl (pka~2.25)), or insecticide (i.e. lamda-cyhalothrin and pirmicarb), a cationic surfactant, such as

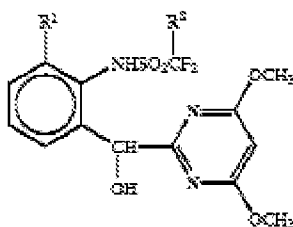
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cetyltrimethylammonium bromide, and a basic substance, such as acid clay (also called Japanese acid clay) (see the abstract, col. 5 lines 62-65, col. 6 lines 8-25, and Examples 1 and 8). The resultant granules typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm (see column 5 lines 3-11). The granules can be prepared according to conventional granule techniques, such as by an extrusion process, where all the ingredients are mixed together (see column 4 lines 50-67). The granules provide reduced sludge and are well suited for use when housed in water soluble bag (see the abstract and column 6 lines 15-20). It is preferred that the granules of the invention swell to form a relatively cohesive swollen mass resulting in slowing of granule dispersion (see column 3 lines 7-23).

**Ascertainment of the difference between the prior art and the claims**  
**(MPEP 2141.02)**

Bell et al. do not teach a composition with a difluoromethanesulfonylanilide derivative. This deficiency is cured by the teachings of Yoshimura et al.

Yoshimura et al. teach do and trifluoromethanesulfonyl anilide derivatives of formula I (see the abstract).



The compounds can be formulated with other active ingredients, solid carriers such as kaolin, bentonite, clay, calcium carbonate, surfactants and can be formulated into granules (see column 8 lines 47-67 and column 9 lines 1-5 and 38-40).

### **Finding of prima facie obviousness**

#### **Rational and Motivation (MPEP 2142-2143)**

One of ordinary skill in the art would have been motivated to make a granular pesticide preparation comprising a difluoromethanesulfonylanilide derivative because Bell et al. suggests granules comprising one or more active herbicidal ingredients.

Although Bell et al. do not teach a difluoromethanesulfonylanilide derivative, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a granular pesticide preparation comprising a difluoromethanesulfonylanilide derivative since it is already known to make granule formulations comprising a difluoromethanesulfonylanilide derivative actives into granule formulations as suggested by Yoshimura et al. Thus, one of ordinary skill would have used a difluoromethanesulfonylanilide derivative since it is suitable for use in granular formulations.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

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9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. (US 6,087,306).

Applicant claims a process of preparing a granular pesticide preparation characterized in that non-disintegrable pesticide granules and a pesticidal active ingredient are subjected to a granulating treatment together with a surfactant and an extender to form granules having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length, wherein said non-disintegrable pesticide granules contain an acidic pesticidal active ingredient, a cationic surfactant and a basic substance, and are not disintegrated in water within 30 minutes.

#### **Determination of the scope and content of the prior art**

##### **(MPEP 2141.01)**

Bell et al. teach a method of preparing granules using conventional granule techniques, such as by an extrusion process, wherein one or more acidic pesticidal active ingredient, such as a herbicide (i.e. fluazifop-p-butyl (pka~2.25)) or insecticide (i.e. lamda-cyhalothrin and pirimicarb), a cationic surfactant, such as cetyltrimethylammonium bromide, and a basic substance, such as acid clay (also called Japanese acid clay) are all mixed together and granulated (see col. 5 lines 62-65, col. 6 lines 8-25, column 4 lines 50-67, and Examples 1 and 8). The resultant granules typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm (see column 5 lines 3-11).

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

Bell et al. teach that granule compositions can be prepared by extrusion granulation but do not exemplify the instant granule composition prepared by such process.

**Finding of prima facie obviousness  
Rational and Motivation (MPEP 2142-2143)**

However, one of ordinary skill in the art would have been motivated to prepare a granular pesticide preparation characterized in that non-disintegrable pesticide granules and a pesticidal active ingredient are subjected to a granulating treatment together with a surfactant and an extender to form granules having a granule size of 0.3 to 3 mm in diameter or of 0.6 to 3 mm in breadth and 2 to 10 mm in length because Bell et al. suggests granules comprising one or more pesticidal active ingredients, cationic surfactants, and basic substances, pre-mixed together before undergoing an extrusion process, where the resultant granules typically have a diameter in the range of about 0.4 to about 5mm and a length from about 1 to 10mm.

Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to prepare the instant granule preparation since Bell et al.

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suggests the process provides improved granule compositions having reduced sludge forming characteristics (see column 1 lines 1-5).

With regard to the recitation in claim 8, i.e. "wherein said non-disintegrable pesticide granules contain an acidic pesticidal active ingredient, cationic surfactant, and basic substance, and are not disintegrable in water within 30 minutes", it is the Examiners position that since the components taught in the prior art fall within the scope of what is claimed and disclosed in Applicant's specification, the composition taught by Bell et al. would possess the instant properties.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

### ***Conclusion***

10. No claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie L. Brooks whose telephone number is (571) 272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616